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ABSTRACT

The Stability of Self Scale has been used to infer the stability of self-concept from responses collected on a single occasion. Using the large, nationally representative Youth in Transition data for 10th grade boys in public high schools in 1966, Stability of Self responses were related to the variability in self-esteem responses collected in 4 consecutive years. Data were from 2,213 10th graders, 1,886 11th graders, 1,799 12th graders, and 1,505 high school graduates. Within-subject variability of self-esteem responses was unrelated to Stability of Self responses, and the correlations among esteem ratings were very similar for students having high, medium, and low Stability of Self responses. Consistent with other research considering short-term stability of esteem, this investigation indicates that stability of esteem cannot be accurately inferred from Stability of Self responses collected on a single occasion. Four tables present study data. Two figures illustrate the study, and an appendix shows the wording of items on the Stability of Self Scale and the Self-Esteem Scale. Thirty references are included. (Author/SLD)

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Self-Esteem Stability and Responses To The Stability of Self Scale

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ABSTRACT

The Stability of Self scale has been used to infer the stability of self-concept from responses collected on a single occasion. Using the large, nationally representative Youth in Transition data, Stability of Self responses were related to the variability in self-esteem responses collected in four consectutive years. Within-subject variability of self-esteem responses was unrelated to Stability of Self responses, and the correlations among esteem ratings were very similar for students having high, medium, and low Stability of Self responses. Consistent with other research considering short-term stability of esteem, the present investigation indicates that stability of esteem cannot be accurately inferred from Stability of Self responses collected on a single occasion.

The stability of personality measures in general and of self-esteem/self-concept measures in particular have important practical and theoretical implications. Murray (1938/1981) noted that a individual's characteristic range of variability in personality is itself an attribute of personality. Fiske (1961) reported that there are systematic and dependable individual differences in the variability of responses. Cattell (1973) claimed that a general tendency for emotions to fluctuate exists as a personality trait. Larsen (1987) argued that emotional variability is a theoretically important characteristic of individuals.

Self-concept theorists are particularly concerned with the temporal stability and variability of self-concept. Rosenberg (1965, 1979, 1985, 1986) emphasized the need for an individual to have a reasonably stable self-concept because "the self-concept is his most fundamental frame of reference; without a firm clear picture of what one is like, the individual is virtually immobilized" (1985, p. 220). Rosenberg also noted similar conclusions drawn by other theorists (e.g., Erikson, 1959; Lecky, 1945; Mead, 1934). Given this theoretical importance, Rosenberg suggested that there was surprisingly little research on self-concept stability. In discussing the stability of self-concept, Markus and Kunda (1986) concluded that "the most pervasive and least ambiguous finding to emerge from the recent surge of research on the self-concept is that individuals seek out consistency and stability and actively resist any information that challenges their prevailing view of themselves" (p. 858). Swann (1983) described cognitive and behavioral strategies that individuals adapt to assure stability of self-concepts.

There is particular interest in the stability of self-concept during the adolescence period that is frequently characterized as a time of "storm and stress." In contrast to this characterization, there is a growing body of evidence suggesting that during adolescence self concept is relatively stable and that growth is gradual and continuous (e.g., Offer, Ostrow & Howard, 1981; Dusek & Flaherty, 1981; O'Malley & Bachman, 1983; Savin-Williams & Demo, 1984). In a recent review of age trends in self-concept, Marsh (1989) reported a gradual decline in self-concept during the preadolescent-to-early-adolescent period, a leveling off during middle adolescence, and a gradual increase during the middle-to-late adolescent period. These age effects, however, were small in size, gradual, and continuous. In their longitudinal study, Savin-Williams and Demo (1984; also see Savin-Williams & Demo, 1983) reported that a wide variety of different indicators of self-concept showed a gradual and slight increase between 7th and 10th grades. They also collected multiple measures of a self-feelings inventory several times a day for a one week period during each year of their study. Based on this short-term data they reported that patterns of marked oscillations in self-feelings were unusual. Savin-Williams and Demo concluded that their short-term and long-term data both suggested that self-concept is relatively stable during adolescence.

Rosenberg (1965) developed the Stability of Self scale to infer the stability of self-esteem from responses at a single point in time. In describing the relevance of this measure he noted that if "a person has unclear, unstable, uncertain opinions, attitudes, and perceptions of himself -- if he simply is not sure of what he

is like -- then he is deprived of his most valuable frame of reference" (p. 153). Rosenberg (1985) referred to the Stability of Self scale as an indicator of certitude or stability, noting that "there is theoretical reason to think that the individual may be as concerned with whether his self-concept is certain or unsure as with whether it is favorable or unfavorable" (p. 220). Commenting on his Stability of Self scale, Rosenberg noted that it does "not distinguish certitude from stability, and we shall here treat these concepts interchangeably" (1985, p. 221). Rosenberg (1985) then went on to demonstrate that responses to his Stability of Self scale were predictably related to other psychological constructs (e.g., depression and anxiety) and that low Stability of Self ratings were more common for 12 and 13 year-old students than for students who were younger or older. Rosenberg (1986), adapting a distinction made by James (1890/1950), argued for the separation of the stability of barometric self-concept that refers to the short-term (moment to moment) stability and the stability of baseline self-concept that refers to changes that take place more slowly over a longer period of time. He noted that "it is possible for the barometric self-concept to fluctuate greatly, even if baseline stability shows little change" (1986, p. 126). Whereas Rosenberg related the Stability of Self responses to many other variables in these studies, these relations were all based on responses from a single occasion. Hence, he did not provide evidence for how well Stability of Self responses predicted either long-term or short-term variability in self esteem.

Kernis, Grannemann and Barclay (1989) asked subjects to complete Rosenberg's (1965) self-esteem and Stability of Self scales, and to indicate how certain they were of their responses to the esteem scale. Then, one month later, subjects completed multiple assessments of a self-feelings instrument and of Rosenberg's esteem scale in naturalistic settings. For a period of one week subjects carried a beeper and were signaled to respond on a random schedule to the self-feelings instrument a total of 40 times. Sometime after 8 P.M. each day, subjects were also signaled to respond to the Rosenberg esteem scale in which they indicated their current self-esteem. Within-subject standard deviations were used to assess variability in current esteem and self-feelings. Certainty ratings for the original self-esteem responses were not significantly related to any other self-esteem indices and thus were not considered further. Variation in current esteem responses was not significantly related to either responses to the original esteem instrument or to the Stability of Self ratings, but was significantly related to a number of indicators of anger and hostility. These results suggest that Rosenberg's Stability of Self scale does not predict either certainty of self-esteem measured at the same time or subsequent, short-term fluctuations in self-esteem. Noting Rosenberg's distinction between barometric stability of self and baseline stability of self, Kernis et al noted that their study focused specifically on barometric (short-term) stability. Hence, the study does not imply that stability of self measures are unrelated to baseline (long-term) stability of self.

Fanzoi and Reddish (1980) noted that Rosenberg's Stability of Self scale offers a possible alternative to assessing stability of self in longitudinal studies. In a psychometric study, they provided support for Rosenberg's claim that the scale was relatively unidimensional. They noted that "one question which remains to be addressed

is whether the Stability of Self Scale should be used instead of longitudinal measures" (p. 1161), concluding that "given the scale's flexibility in application and the relative ease with which it can be administered and scored, it deserves greater consideration by those who seek information on self-concept" (p. 1162). The purpose of the present investigation is to pursue this question by relating responses to the Stability of Self Scale to long-term stability in self-esteem responses.

METHOD

Sample and Procedures.

Data came from the large, nationally representative Youth in Transition study of all 10th grade boys in public high schools in 1966 (Bachman, 1970; Bachman & O'Malley, 1977; 1986). A two-stage sampling scheme was used in which a random sample of 87 public high schools was selected and then approximately 25 students were randomly selected from each school. Data in the present investigation came from the commercially available longitudinal data file that comprises information from waves 1 (early 10th grade; N=2213), 2 (late 11th grade; N=1886), 3 (late 12th grade; N=1799), and 4 (one year after normal high school graduation; N=1620).

For each of the four data waves, esteem scale scores were the mean response to 10 items and Stability of Self scale scores were the mean of responses to 5 items (see Appendix 1). In the commercially available longitudinal data set (Bachman, 1975), scale scores were defined as the mean of nonmissing responses so long as students responded to at least 8 (of 10) esteem items and 4 (of 5) stability items; otherwise the scale scores were assigned to be missing. For purposes of the present investigation, responses are considered for only the 1505 students who had no missing values for the 4 scale scores for esteem and the 4 scale scores for stability (93% of the respondents who responded to the questionnaire at time 4).

Because of the two-stage cluster sampling scheme used in the original data collection, standard errors based on the assumption of simple random sampling are biased. In order to compensate for this bias, Bachman and O'Malley (1986) suggested that an N of 1000 be used for purposes of testing statistical significance in an analysis of based on a similar number of students as considered here. It should be emphasized that this only affects decisions of statistical significance and in no way affects actual parameter estimates. For purposes of the present investigation, no such correction was made so that tests of statistical significance are biased in the direction of finding too many statistically significant differences. Because critical conclusions to be discussed are based on support for the null hypothesis of no effect, this bias provides conservative tests. Because the sample size is so large, however, statistical significance is not an important issue.

Preliminary Analysis.

The primary focus of the present investigation is to examine relations between variation in esteem responses over time and Stability of Self measures. It is important and of general interest, however, to evaluate characteristics of these responses. Correlations among the esteem and Stability of Self measures from the four

data waves are presented in Table 1, along with means, standard deviations, and coefficient alpha estimates of reliability. The means of the esteem and stability measures increase systematically with age. Because of the large sample size these mean shifts are statistically significant ($p < 0.001$) and most of these differences are linearly related to age. The internal consistency estimates also increase with age -- particularly for Stability of Self measures.

Insert Table 1 About Here

Correlations among esteem scores vary from .423 to .646 (mn r = .547) whereas correlations among stability scores vary from .330 to .551 (mn r = 0.428). For both constructs, stability coefficients increase with age and are larger for measures that are temporally closer together so that the highest stability coefficients are between measures collected at times 3 and 4. Whereas it may not be entirely appropriate to correct stability coefficients for unreliability based on coefficient alpha estimates of reliability, the mean stability coefficients would be about .7 (esteem) and 0.6 (stability) whereas the largest stability coefficients would be about 0.8 (esteem) and .7 (stability). These preliminary inspections indicate that the two constructs are reasonably stable but also indicated that there is some instability in responses over the four occasions.

Correlations between the esteem and Stability of Self on four occasions, the 8x8 correlation matrix in Table 1, can also be seen as a multitrait-multimethod matrix in which esteem and stability are the multiple traits and 4 occasions are the multiple methods (see Marsh, 1989, for a discussion of multitrait-multioccasion data). Though not a primary focus of the present investigation, the application of the traditional Campbell and Fiske (1959; also see Marsh, 1989) criteria for multitrait-multimethod matrices provides clear support for both the convergent and discriminant validity of the two constructs. Because the mean correlations between esteem and stability scales (.261) is substantially lower than the stability coefficients, there is clear support for the separation of the two constructs. Correlations among the two constructs are, however, higher when both were collected at the same time (mn r = .374) and become systematically higher with age. These results indicate that esteem and stability scores are moderately correlated but clearly represent distinct constructs.

Results and Discussion

Relations Between With-subject Variability in Esteem and Stability Ratings

Stability over time is frequently inferred on the basis of the standard deviation of measures (i.e., the 4 esteem scale scores) computed separately for each subject. Although reasonable, there are several problems with this index of within-subject variability of esteem over time. First, in the present investigation, there is a systematic -- primarily linear -- increase in esteem scores over time. Hence, subjects who show small increases in esteem over time could be argued to be "normatively" stable even though their responses are not absolutely stable. For this reason, within-subject standard deviations were computed on the basis of both raw esteem scores, and esteem scores which had been standardized (Mn = 0, SD = 1) separately for each occasion so that systematic age effects were removed. Both of these within-subject standard deviations were then correlated with

Stability of Self ratings collected at times 1-4 and their average (Table 2). The sizes of these correlations are very small (-.013 to -.069) and frequently fail to even reach statistical significance. Hence there is almost no relation between Stability of Self measures and these indices of within-subject variation in esteem over time.

Insert Table 2 About Here

Larsen (1987) argued that within-subject standard deviations like those used here are not an appropriate measure of stability. He correctly pointed out that extreme fluctuations between each point in time can result in the same within-subject standard deviation as systematic changes (e.g., a linear increase) in which differences at adjacent points in time are much smaller. Unfortunately, however, there are insufficient data points for each subject in the present investigation to consider the time series or spectral analysis used by Larsen. It is possible, however, to evaluate his suggestion by computing the sum of squared deviations between adjacent points for each subject instead of the sum of squared deviations from the mean that is the basis of the within-subject standard deviation. Measures of this alternative conceptualization of within-subject variability were computed for raw esteem scores and standardized esteem scores, and these indices were correlated with Stability of Self-ratings. Again, however, these correlations (Table 2) are consistently close to zero (.038 to -.078) and frequently are not even statistically significant.

In summary, four different indices of within-subject variation in esteem over time were related to subjects' responses to the Stability of Self scale. Across all the indices and the different stability scores the sizes of correlations were consistently close to zero. These results clearly indicate that within-subject variation in esteem over time is not related to responses to the Stability of Self scale.

Esteem Stability Coefficients for Subjects Varying in Stability of Self Ratings

Correlations among esteem scores from the 4 data waves (see earlier discussion of Table 1) provide one indication of the stability of esteem over time. The purpose of analyses in this section is to determine whether these correlations differ systematically depending on Stability of Self-ratings. Based on Stability of Self ratings at each point in time and the average across the four occasions, the group of 1505 students was divided into high, medium, and low Stability of Self groups. Correlations among esteem measures over the four occasions were then computed separately for each group. The mean correlation for each group did not vary systematically with Stability of Self ratings. For 4 of the 5 Stability of Self scores (i.e., the 4 times and their total), the mean correlation was lowest for the group with the highest Stability of Self ratings.

Box's M (SPSS, 1988; Tabachnick & Fidell, 1989) provides an extremely sensitive test of the equality of correlation matrices across groups. This statistical test, however, is known to be notoriously sensitive to very small differences -- particularly when sample size is large. Tabachnick and Fidell, for example, suggest that "Box's M is too sensitive to use at routine " levels" (p. 441). Application of Box's M in the present investigation (Table 3) resulted in one non-significant difference, three differences significant at $p < .05$, one difference

significant at p = .009. Given the sensitivity of this test and the large sample sizes, these results indicate that differences among the correlation matrices are small.

Insert Table 3 About Here

In summary, stability coefficients of measures of esteem over the four occasions did not differ substantially for groups that had high, medium and low Stability of Self ratings.

Path Analyses Relating Esteem, Stability of Self, and Their Interaction at Each Different Point in Time

Path analyses are frequently used to examine relations among among the same variables (e.g., esteem and Stability of Self) measured on multiple occasions. In this approach, the typical concern is with questions such as whether esteem at time 1 significantly affects Stability of Self at time 2 beyond what can be explained by Stability of Self at time 1. Although these questions are of interest here as well, the primary concern is with the effect of the esteem by Stability of Self interaction on subsequent esteem scores. If, for example, stability of esteem was systematically lower when Stability of Self ratings were lower, then an interaction such as shown in Figure 1 would be expected. For students with high Stability of Self scores, self-esteem would be expected to remain relatively constant over time. For students with low Stability of Self scores, self-esteem would be expected to regress toward the mean over time; students with high self-esteem at one time would tend to have lower self-esteem the next, whereas students with low self-esteem at one time would tend to have higher self-esteem the next.

Insert Figures 1 and 2 About Here

For purposes of the present path analysis, the esteem by Stability of Self interaction on each occasion is represented by a cross-product term in which esteem and Stability of Self scores are multiplied together. Multiple regression was then used to predict esteem, Stability of Self, and their cross-product on each occasion from all scores from earlier occasions. The results of this analysis are summarized in Figure 2 and presented in greater detail in Table 4. For present purposes, the most important parameters are the path coefficients leading from esteem by Stability of Self interactions to subsequent measures of esteem. These 6 path coefficients are all close to zero (-.025 to .035) and none is statistically significant ($p < .05$). Consistent with earlier analyses, these results indicate that the stability of esteem ratings over time does not depend on Stability of Self ratings.

Insert Table 4 About Here

Although not a major focus of the present investigation, other aspects of the path analysis are relevant. For all three intervals, prior esteem has a moderate and statistically significant effect on Stability of Self ratings. Students with higher esteem on one occasion have higher Stability of Self ratings on the next occasion than can be explained by prior Stability of Self ratings. For two of the three lags, the prior Stability of Self ratings also have a statistically significant effect on subsequent esteem. Even though these coefficients are small, they suggest that students who rate their Stability of Self to be more stable on one occasion have slightly higher

esteem on the next occasion than can be explained in terms of prior esteem ratings. These results suggest a pattern of reciprocal relations between these two constructs, though the effects of prior esteem on subsequent Stability of Self ratings are larger than the effects of prior Stability of Self on subsequent esteem.

Summary and Implications

The results of a wide variety of different analyses consistently demonstrated that the stability of esteem ratings over time were nearly unrelated to Stability of Self ratings. Although claiming support for the null hypothesis is typically a tenuous undertaking, several features of the present investigation make this less of a problem. First, as described earlier, tests of statistical significance considered here were biased in the direction of finding statistical significant. Second, the extremely large sample size meant that the standard errors of parameters were so small that any substantively important effects would necessarily be significant at very conservative alpha levels.

The results of the present investigation indicate that Stability of Self responses at one point in time are unable to predict the subsequent, long-term stability of self-esteem responses. These results are consistent with earlier research showing that Stability of Self responses are not significantly related to short-term fluctuations in self-esteem. Together, these findings support the logical contention that the stability of self-concept -- short-term or long-term -- cannot be adequately studied from responses collected at a single point in time. The study of the stability/instability of self-concept is of theoretical and practical significance, but future research should be based on variations in esteem responses collected on multiple occasions rather than responses to the Stability of Self scale collected at a single point in time. These results also indicate a clear answer the question posed by Franzoi and Reddish when they indicted that "one question which remains to be addressed is whether the Stability of Self Scale should be used instead of longitudinal measures" (p. 1161); the answer is No.

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Table 1

Correlations Among Self-Esteem (ES) and Stability of Self (ST) at Times 1 - 4.

	ES1	ES2	ES3	ES4	ST1	ST2	ST3	ST4
Esteem								
ES1	1.0000							
ES2	.530	1.0000						
ES3	.485	.636	1.0000					
ES4	.423	.560	.646	1.0000				
Stability								
ST1	.258	.191	.177	.179	1.0000			
ST2	.220	.362	.261	.240	.423	1.000		
ST3	.209	.294	.428	.354	.361	.463	1.000	
ST4	.190	.294	.344	.447	.330	.437	.551	1.0000
Mean	3.761	3.832	3.888	3.900	2.946	3.059	3.073	3.176
SD	.512	.484	.499	.491	.670	.704	.697	.698
Alpha	.752	.764	.793	.806	.650	.740	.755	.787

Note. Larger scores reflect more a favorable esteem and greater stability. All correlations are statistically significant.

Table 2

Correlations Between Within-subject Variability in Self-Esteem and Stability of Self scale Scores.

Variability in Esteem Across T1 - T4	Stability of Self Scale Scores				
	Time 1	Time 2	Time 3	Time 4	Total[a]
Within-Subject Standard Deviations					
Raw Scores	-.064*	-.013	-.013	.007	-.027
Z-Scores	-.050	-.016	-.069**	-.053*	-.062*
Within-Subject Variation for Adjacent Scores[b]					
Raw Scores	-.085**	.038	-.039	-.050	-.047
Z-Scores	-.078	.030	-.061**	-.067**	-.058*

* $p < .05$; ** $p < .01$.

[a] The Total score for Stablity of Self ratings is the average response from T1-T4. [b] The two scores used to infer variation for adjacent scores were defined as: $\Sigma (X_i - X_{i-1})^2$, and $\Sigma (Z_i - Z_{i-1})^2$ for i= time 1 to time 4, where X and Z are raw scores and Z-scores (standardized to have Mn=0 and SD=1 for the all 1505 scores separate at each time).

Table 3

Correlations Among Esteem Scores For T1-T4 for Students with High, Medium, and Low Stability Scores at T1-T4 and Their Total

Stability Trichotomies based on Stability Scores for	Mean Correlation Among Esteem Scores			Homogeneity of the three correlation matrices $X^2(20)$ =
	Low Stability Students	Medium Stability Students	High Stability Students	
Time 1	.492	.525	.573	37.75 *
Time 2	.516	.521	.498	20.69
Time 3	.499	.522	.491	31.76 *
Time 4	.503	.514	.498	37.89 **
Total (T1-T4)	.513	.484	.455	34.39 *

Note. Subjects were divided into three groups having stability scale more than .5 SD below the mean, within .5 SD of the mean, and more than .5 SD above the mean. Groups were formed separately for stability scores based on each time (T1-T4) and their total. The mean of correlations among the esteem scores for T1-T4 (i.e., the mean of 6 correlations) was then computed for each of the three groups. Finally, Box's M (SPSS, 1986) was used to test the homogenity of the correlations among esteem scores for students with low, medium and high Stability of Self scale scores.

* $p < .05$; ** $p < .01$.

Table 4

Summary of Path Coefficients Relating Relating Esteem (ES), Stability of Self (ST), and Their Interactions (IN) [a] At Each Point in Time (see Figure 1).

Path Coeff. Leading To:	Path Coefficients Leading From the Following Variables												
	Time 1			Time 2			Time 3			Time 4			
	ES1	ST1	IN1	ES2	ST2	IN2	ES3	ST3	IN3	ES4	ST4	IN4	Mult r
Time1													
ES1	--- [b]												---
ST1	(.26)	---											---
IN1	(.00)	(.00)	---										---
Time2													
ES2	.51***	.06*	.03	---									.534***
ST2	.12***	.39***	.03	(.29)	---								.439***
IN2	-.01	-.03	.20***	(.01)	(.00)	---							.198***
Time3													
ES3	.20**	-.03	-.03	.52***	.02	-.02	---						.661***
ST3	.00	.19***	-.02	.13***	.33***	.01	(.34)	---					.514***
IN3	.02	.00	.14***	-.02	.04	.20***	(.01)	(.00)	---				.268***
Time 4													
ES4	.08***	.02	-.02	.22***	-.02	.02	.43***	.09***	.00	---			.683***
ST4	-.03	.10***	.01	.05	.18***	.01	.10***	.38***	.01	(.30)	---		.604***
IN4	.06	-.03	.04	-.03	-.02	.15	-.03	.04	.31***	(.01)	(.00)	---	.392***

Note. Analyses summarized here are based on the path model in Figure 2. A series of multiple regressions was conducted in which each variable was predicted by all the other variables that were collected prior to it. For purposes of these analyses, all variables collected at the same time were assumed to be correlated but not to have any (causal) effects on each other.

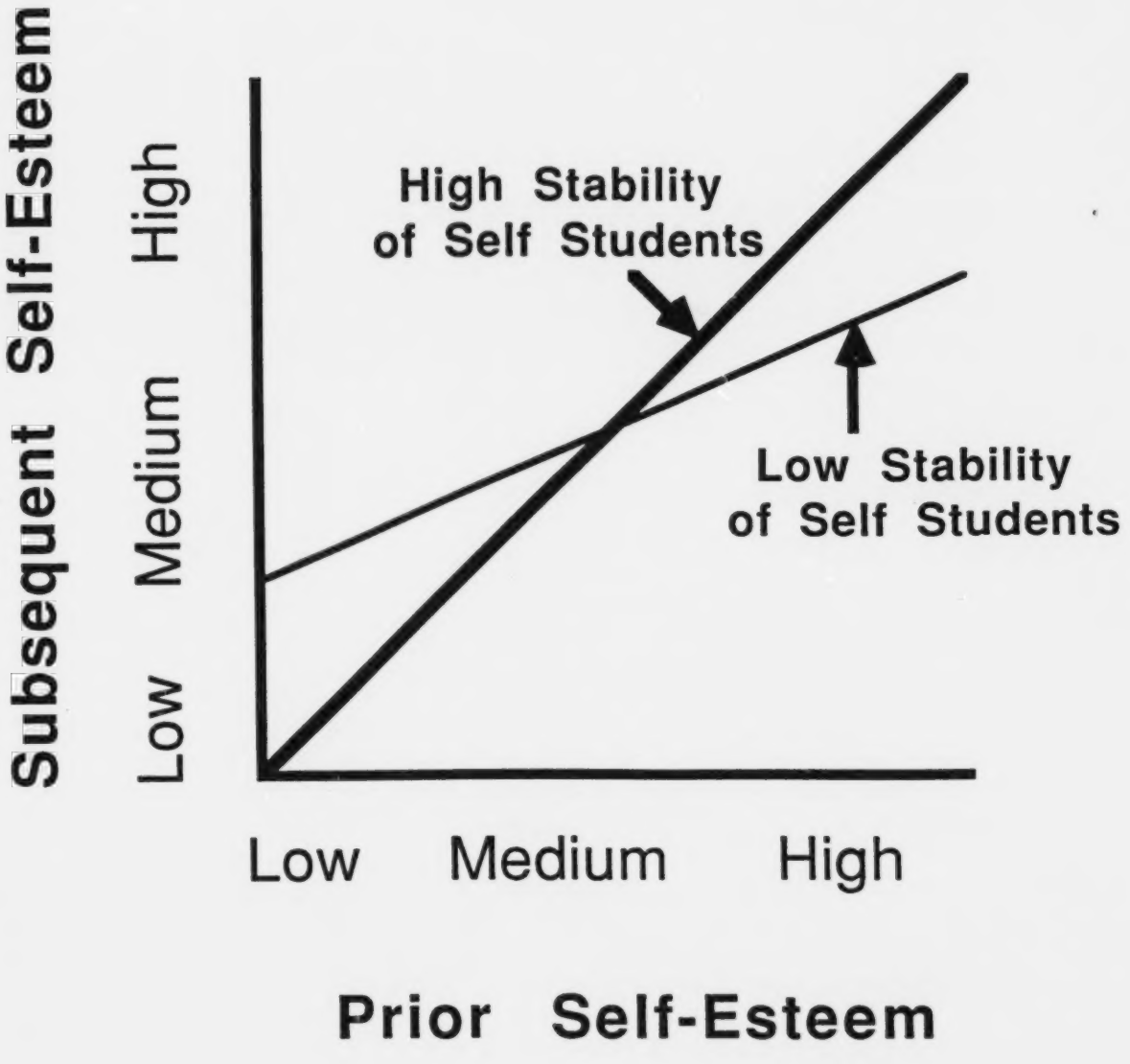
* $p < .05$; ** $p < .01$; *** $p < .001$.

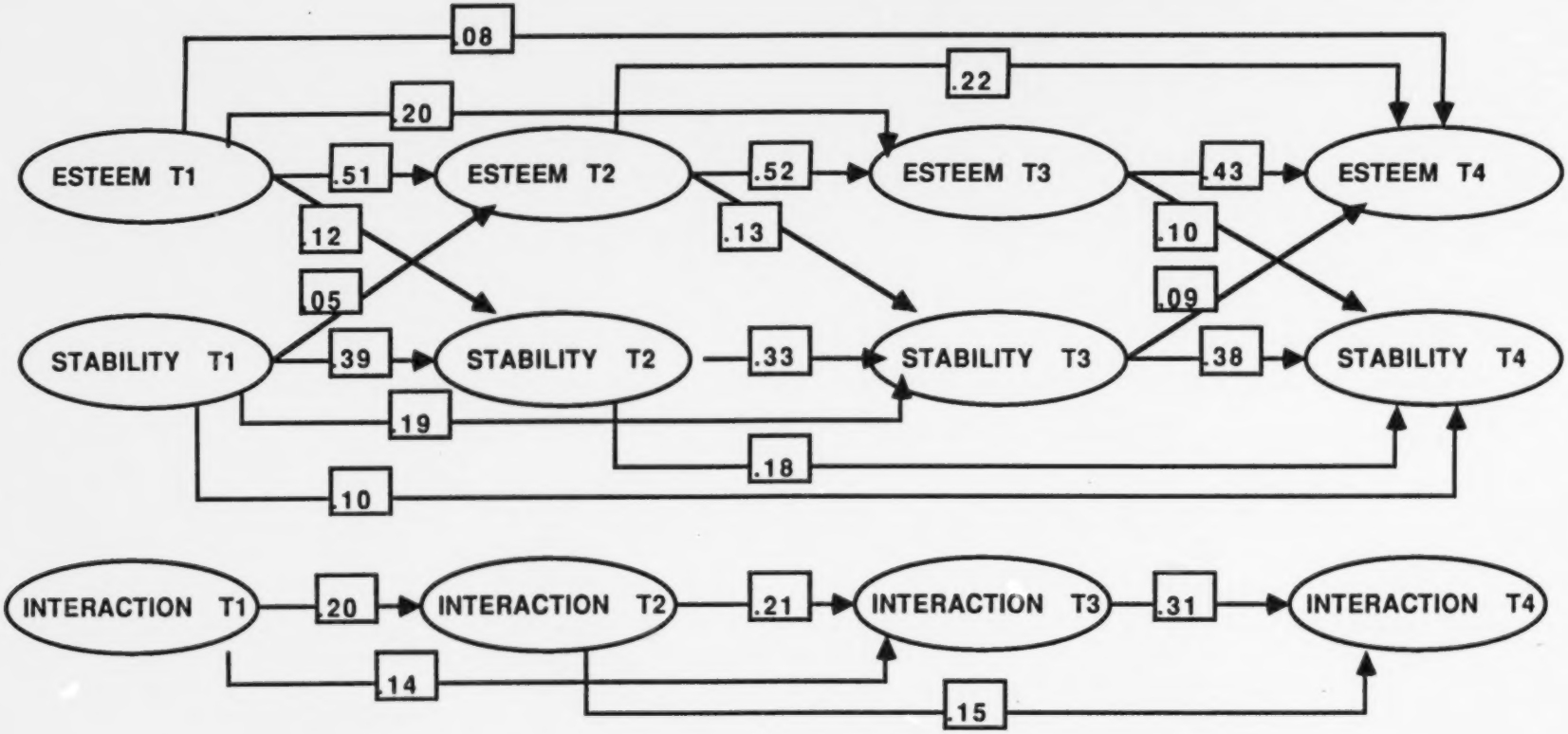
[a] Interaction terms for each occassion were computed by first multiplying together the esteem and Stability of Self scores after each had been standardized (mean = 0, SD = 1) and then partialling out the linear effects of esteem and Stability of Self (i.e., removing the main effects so that the cross-product represented only the interaction effects). [b] Coefficients in parentheses are relations among variables collected at the same point in time. These were posited to be correlated, but not to have any causal effects on each other. At time 1 these are correlations whereas at times 2 -4 these are partial correlations in which the effects of all prior variables have been partialled out.

Figure Captions

FIGURE 1. Hypothetical Interaction Between Prior Self-Esteem and Stability of Self Responses on Subsequent Self-Esteem. Individuals with low prior self-esteem and high Stability of Self responses are expected to have lower subsequent esteem than students with low prior self-esteem and low Stability of Self responses. Conversely , students with high prior self-esteem and high Stability of Self responses are expected to have higher subsequent esteem than students with high prior self-esteem and low Stability of Self responses. In both cases, regression to the mean from one occasion to the next will be greater for students with low Stability of Self responses.

Figure 2. Path Model Relating Esteem, Stability of Self, and their Interaction on each of Four Occasions (T1 - T4). A "full forward" model was posited in which all variables at each occasion are hypothesized to effect all variables on all subsequent occasions. Esteem and Stability of Self responses at the same occasion are assumed to be correlated (see Table 4) and no causal ordering is hypothesized. Nonsignificant paths are excluded, but the coefficients are presented in Table 4.


Subsequent Self-Esteem
Low
Medium
High
High Stability
of Self Students
Low Stability
of Self Students
Low
Medium
High
Prior Self-Esteem


.08
.22
.20
ESTEEM T1
.51
ESTEEM T2
.52
ESTEEM T3
.43
ESTEEM T4
.12
.13
.10
.05
.09
STABILITY T1
.39
STABILITY T2
.33
STABILITY T3
.38
STABILITY T4
.19
.18
.10
INTERACTION T1
.20
INTERACTION T2
.21
INTERACTION T3
.31
INTERACTION T4
.14
.15

Appendix 1

Wording of the Items on the Stability of Self and Self-Esteem Scales

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Stability of Self Scale

My opinion of myself tends to change a good deal instead of always remaining the same. (reverse scored)

I find that on one day I have one opinion of myself and on another day I have a different opinion. (reverse scored)

I change from a very good opinion of myself to a very poor opinion of myself. (reverse scored)

I have noticed that my ideas about myself seem to change very quickly. (reverse scored)

I feel that nothing can change the opinion I currently hold of myself.

Self-Esteem

I feel that I'm a person of worth, at least on an equal plane with others.

I feel that I have a number of good qualities.

I am able to do things as well as most people.

I feel that I do not have much to be proud of. (reverse scored)

I take a positive attitude toward myself.

Sometimes I think I am no good at all. (reverse scored)

I am a useful guy to have around.

I feel that I can't do anything right. (reverse scored)

When I do a job, I do it well.

I feel that my life is not very useful. (reverse scored)

Note. All responses were on a five-point response scale: Never true; Seldom true; Sometimes true; Often true; and Almost always true.